

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

DATE MAILED: 12/29/2004

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/663,869	09/15/2000	David Skirmont	P4505	4196
24739	7590 12/29/2004		EXAMINER	
	COAST PATENT AG	STEVENS, R	OBERTA A	
	PO BOX 187 AROMAS, CA 95004			PAPER NUMBER
ŕ			2665	

Please find below and/or attached an Office communication concerning this application or proceeding.

4	4	1	_
4			

		Application No.	Applicant(s)					
Office Action Summary		09/663,869	SKIRMONT ET AL.					
		Examiner	Art Unit					
		Roberta A Stevens	2665					
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).								
Status		•						
1)🛛	Responsive to communication(s) filed on 01 Se	ptember 2004.						
2a)⊠	This action is FINAL . 2b) ☐ This	action is non-final.						
3)□	Since this application is in condition for allowan	·						
	closed in accordance with the practice under E.	x parte Quayle, 1935 C.D. 11, 45	3 O.G. 213.					
Dispositi	on of Claims							
4)🖂	Claim(s) <u>1-20</u> is/are pending in the application.							
	4a) Of the above claim(s) is/are withdrawn from consideration.							
5)	Claim(s) is/are allowed.							
	Claim(s) <u>1-20</u> is/are rejected.							
	Claim(s) is/are objected to.							
8)[_	Claim(s) are subject to restriction and/or	election requirement.						
Applicati	on Papers							
9)□	The specification is objected to by the Examiner							
10)[The drawing(s) filed on is/are: a) acce	epted or b) objected to by the E	Examiner.					
	Applicant may not request that any objection to the o	frawing(s) be held in abeyance. See	37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11) 🗌	The oath or declaration is objected to by the Exa	aminer. Note the attached Office	Action or form PTO-152.					
Priority under 35 U.S.C. § 119								
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 								
Attachment(s)								
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)								
3) Inform	e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date	Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:	te atent Application (PTO-152)					

Application/Control Number: 09/663,869 Page 2

Art Unit: 2665

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 3. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Newhall (U.S. 5682479).
- 4. Regarding claim 1, Newhall teaches (figure 21) In a data packet router, a method for redirecting packets destined for a port, comprising: monitoring port status on a continuing or periodic basis; updating a port-status table listing port status as active or failed (col. 13, lines 1-7); checking the table by circuitry along a packet route for a packet en route (col. 20, line 44 col. 21, line 15); and sending the received packet to the predetermined port if the port is listed in the table as active, and sending the received

Art Unit: 2665

packet to the alternative destination if the port is listed in the table as failed (col. 21, line 51 - col. 22, line 13).

- 5. Newhall does not teach a status table listing an alternative destination for each port along with the active or failure status.
- 6. Newhall does teach an alternative route upon failure. It would have been obvious to one of ordinary skill in the art to adapt to Newhall's system one table for active failure and re-direct port to reduce complexity within the system.
- 7. Regarding claim 2, Newhall teaches (figure 21) the port status table is stored in a fabric circuitry and checking and redirecting is implemented in the fabric circuitry.
- 8. Regarding claims 3, 8 and 14, as for the table being stored in a Global Fabric ASIC or a Packet Processing ASIC on a line card and enabling redirection by a CPU on a line card, Application Specific Integrated Circuit is obvious in Nwhall's system for decision making tasks between the switch and the processor.
- 9. Regarding claims 4, 10, and 15, as mentioned above Newhall teaches all of the limitations of claims 1, 7 and 13.
- 10. Newhall does not teach implementing the operations in hardware logic. However, Newhall does teach (col. 22, lines 45-55) that one skilled in the art would recognize that an alternative physical architecture (hardware logic) can present the same functionality and be implemented with the same invention.

11. Regarding claim 5, as for the alternative destination being a Packet processing

Page 4

ASIC, Application Specific Integrated Circuit is obvious in Newhall's system for

decision making tasks between the switch and the processor.

12. Regarding claims 6, 12 and 17, Newhall teaches (col. 22, lines 56 – col. 23, line

9) pre-destinations and alternative destinations are noted by destination tags associated

with the packets in process.

13. Regarding claim 7, Newhall teaches (figure 21) a router card enabled for ASP,

and comprising: one or more circuits enabled for forwarding data packets; and a port

status table (col. 20, line 44 – col. 21, line 15); characterized in that the port status table

lists individual ports status as active or failed (col. 13, lines 1-7), and in that packets

predetermined for failed ports are redirected to alternative ports (col. 21, line 51 – col. 22,

line 13).

14. Newhall does not teach a status table listing an alternative destination for each

port along with the active or failure status.

15. Newhall does teach an alternative route upon failure. It would have been obvious

to one of ordinary skill in the art to adapt to Newhall's system one table for active failure

and re-direct port to reduce complexity within the system.

16. Regarding claim 9, as for the card being a fabric card interconnecting line cards, it

is obvious in Newhall's system that the crossbar (fabric card) interconnects ports (line

cards).

Application/Control Number: 09/663,869

Art Unit: 2665

17. Regarding claims 11, 16 and 19, as for the alternative destination being a port on

Page 5

a line card it in inherent in Newhall's hub/router system that in order for date to be

transmitted, line cards having ports are included.

18. Regarding claim 13, Newhall teaches (figure 21) a data packet router, comprising

one or more circuits enabled for forwarding data packets; and a pot-status table (col. 20,

line 44 – col. 21, line 15); characterized in that the port status table lists individual ports

status as active or failed (col. 13, lines 1-7), and in that packets predetermined for failed

ports are redirected to alternative ports (col. 21, line 51 – col. 22, line 13).

19. Newhall does not teach a status table listing an alternative destination for each

port along with the active or failure status.

20. Newhall does teach an alternative route upon failure. It would have been obvious

to one of ordinary skill in the art to adapt to Newhall's system one table for active failure

and re-direct port to reduce complexity within the system.

21. As for the externally facing line cards internally connected by fabric cards, it is

inherent in Newhall's hub/router system that in order for date to be transmitted, line cards

having ports are included.

22. Regarding claim 18, Newhall (col. 20, lines54-67) the port status table is a

distributed table with portions stored in separate places.

Art Unit: 2665

23. Regarding claim 20, as for the alternative destination being on the same line card, it is obvious in Newhall's system that the alternative destination can be on the same line card, because there can be more than one port on the line card.

Response to Arguments

24. Applicant's arguments filed September 1, 2004 have been fully considered but they are not persuasive. Applicant argues that Newhall fails to teach monitoring of the port by configuration element or any other means. Applicant is directed to col 13, lines 1-7 where it is disclosed that a configuration element stores port status (active or faults) information. There has to be a monitoring means in order for the status of the ports to be known. Applicant also argues that Newhall does not disclose status of the ports in the routing table. Applicant is directed to col. 13, line 64 – col. 14, line 8, where Newhall discloses a routing table including primary port and alternative ports for routing a packet when the primary port fails.

Application/Control Number: 09/663,869

Art Unit: 2665

Conclusion

Page 7

- 25. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
- A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.
- 27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberta A Stevens whose telephone number is 571-272-3161. The examiner can normally be reached on M-F 9:00am-5:30pm.
- 28. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.
- 29. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

Art Unit: 2665

published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Roberta A Stevens Examiner Art Unit 2665 Page 8

STEVEN NGUYEN PRIMARY EXAMINER